

Title (en)

Anhydrous carbonylation process for the production of acetic acid

Title (de)

Wasserfreies Carbonylierungsverfahren zur Herstellung von Essigsäure

Title (fr)

Procédé de carbonylation anhydre pour la préparation de l'acide acétique

Publication

EP 0936209 B1 20021113 (EN)

Application

EP 99300359 A 19990119

Priority

GB 9802027 A 19980131

Abstract (en)

[origin: EP0936209A1] An anhydrous process for the production of acetic acid by the reaction of methanol, and/or dimethyl ether, with a gaseous reactant comprising carbon monoxide and hydrogen, the hydrogen being present in an amount less than 9 mole %, in the presence of a catalyst system comprising at least one noble metal of Group VIII of the Periodic Table as catalyst, a halo-compound as co-catalyst and an iodide salt as catalyst stabiliser which process comprises feeding methanol, and/or dimethyl ether, and gaseous reactant to a carbonylation reactor in which there is maintained a liquid reaction composition comprising (i) methyl acetate in an amount from 1 to 35% w/w, (ii) acetic anhydride in an amount up to 8% w/w, (iii) halo-compound in an amount from 3 to 20% w/w, (iv) Group VIII noble metal catalyst in an amount from 1 to 2000 ppm, (v) sufficient iodide salt to provide from 0.5 to 20% by weight iodine as I<-> and (vi) acetic acid comprising the remainder of the composition.

IPC 1-7

C07C 51/12; C07C 53/08

IPC 8 full level

B01J 23/46 (2006.01); **C07B 61/00** (2006.01); **C07C 51/12** (2006.01); **C07C 53/08** (2006.01); **C07C 53/12** (2006.01)

CPC (source: EP US)

C07C 51/12 (2013.01 - EP US); **Y02P 20/582** (2015.11 - EP US)

Cited by

WO2006091397A1; EP3241821A4; EP3623359A1; US11014868B2

Designated contracting state (EPC)

BE DE ES FI FR GB IT NL SE

DOCDB simple family (publication)

EP 0936209 A1 19990818; EP 0936209 B1 20021113; AR 015511 A1 20010502; BR 9900314 A 20000502; CA 2259095 A1 19990731; CN 1135211 C 20040121; CN 1228408 A 19990915; DE 69903865 D1 20021219; DE 69903865 T2 20030911; ES 2187117 T3 20030516; GB 9802027 D0 19980325; ID 23562 A 20000504; JP 4173237 B2 20081029; JP H11315046 A 19991116; KR 100591051 B1 20060619; KR 19990068064 A 19990825; MY 117885 A 20040830; NO 990394 D0 19990128; NO 990394 L 19990802; RU 2197470 C2 20030127; SG 71188 A1 20000321; TW 483885 B 20020421; UA 61078 C2 20031117; US 6130355 A 20001010; ZA 9986 B 20000706

DOCDB simple family (application)

EP 99300359 A 19990119; AR P990100388 A 19990129; BR 9900314 A 19990129; CA 2259095 A 19990112; CN 99101723 A 19990201; DE 69903865 T 19990119; ES 99300359 T 19990119; GB 9802027 A 19980131; ID 990063 D 19990129; JP 2326899 A 19990129; KR 19990001877 A 19990122; MY PI9900312 A 19990129; NO 990394 A 19990128; RU 99101938 A 19990201; SG 1999000042 A 19990112; TW 88100026 A 19990104; UA 99010518 A 19990129; US 22035598 A 19981224; ZA 9986 A 19990106